

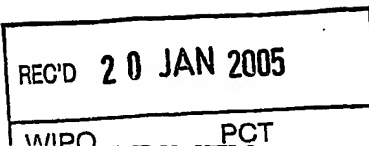
PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference 4 - 32540A/NFI 802	FOR FURTHER ACTION		See Form PCT/IPEA/416
International application No. PCT/EP2004/000514	International filing date (day/month/year) 22.01.2004	Priority date (day/month/year) 23.01.2003	
International Patent Classification (IPC) or national classification and IPC C07D403/06			
Applicant NOVARTIS AG et al.			
1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36. 2. This REPORT consists of a total of 6 sheets, including this cover sheet. 3. This report is also accompanied by ANNEXES, comprising: a. <input type="checkbox"/> sent to the applicant and to the International Bureau a total of sheets, as follows: <input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).			
4. This report contains indications relating to the following items: <div style="display: flex; flex-direction: column; gap: 5px;"> <div><input checked="" type="checkbox"/> Box No. I Basis of the opinion</div> <div><input type="checkbox"/> Box No. II Priority</div> <div><input checked="" type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</div> <div><input type="checkbox"/> Box No. IV Lack of unity of invention</div> <div><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</div> <div><input type="checkbox"/> Box No. VI Certain documents cited</div> <div><input checked="" type="checkbox"/> Box No. VII Certain defects in the international application</div> <div><input checked="" type="checkbox"/> Box No. VIII Certain observations on the international application</div> </div>			
Date of submission of the demand 19.08.2004		Date of completion of this report 18.01.2005	
Name and mailing address of the international preliminary examining authority: <div style="display: flex; align-items: center;"> <div> European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465 </div> </div>		Authorized Officer Samsam Bakhtiary, M Telephone No. +49 89 2399-8556	



**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/EP2004/000514

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1-35 as originally filed

Claims, Numbers

1-10 as originally filed

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/EP2004/000514

Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

☐ the entire international application,

☒ claims Nos. 9,10

because:

☒ the said international application, or the said claims Nos. 9,10 in respect with industrial applicability relate to the following subject matter which does not require an international preliminary examination (specify):

see separate sheet

☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☐ no international search report has been established for the said claims Nos.

☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:

the written form

☐ has not been furnished

☐ does not comply with the standard

the computer readable form

☐ has not been furnished

☐ does not comply with the standard

☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-*bis* of the Administrative Instructions.

☐ See separate sheet for further details

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/EP2004/000514

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-10
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-10
Industrial applicability (IA)	Yes: Claims	1-8
	No: Claims	9,10

2. Citations and explanations (Rule 70.7):

see separate sheet

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

see separate sheet

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

see separate sheet

**INTERNATIONAL PRELIMINARY
REPORT ON PATENTABILITY
(SEPARATE SHEET)**

International application No.

PCT/EP2004/000514

Re Item III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

Claims 9,10 relate to subject-matter considered by this Authority to be covered by the provisions of Rule 67.1(iv) PCT. Consequently, no opinion will be formulated with respect to the industrial applicability of the subject-matter of these claims (Article 34(4)(a)(I) PCT).

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Reference is made to the following documents:

- D1: WO 01/27102 A (MEINGASSNER JOSEF GOTTFRIED ;NOVARTIS
ERFIND VERWALT GMBH (AT); AL) 19 April 2001 (2001-04-19)
- D2: WO 02/28842 A (NOVARTIS ERFIND VERWALT GMBH ;DAWSON KING
JANET (CH); ALBERT RAINE) 11 April 2002 (2002-04-11)
- D3: SOMPONG WATTANASIN: '1,4-Diazepane-2-ones as novel inhibitors of
LFA-1' BIOORGANIC AND MEDICINAL CHEMISTRY LETTERS, vol. 13, no.
3, 9 September 2002 (2002-09-09), pages 499-502, XP002277292 .

2. **Novelty** (article 33.2 PCT)

None of the 3 documents cited in the search report namely D1-D3 discloses any specific compounds which would challenge the novelty of the claimed subject matter of this application.

The claimed subject matter of this application can be recognised.

3. Inventive step (article 33.3 PCT)

The subject-matter of claim 1 consists in the selection of a sub-family of compounds from the a broader family described in document D1 (see claim 1). Such a selection can only be regarded as inventive, if the claimed compounds presents unexpected effects or properties in relation to the closest (structurewise) compound of D1. However, no such effects or properties are indicated in the application. Hence, no inventive step is present in the subject-matter of claim 1-10.

Re Item VII

Certain defects in the international application

Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the documents D1-D3 is not mentioned in the description, nor are these documents identified therein.

D2 and D3 have been cited as A documents in the search report, nevertheless from a structural point of view these documents are relevant and should be referred to in the description.

Re Item VIII

Certain observations on the international application

1. For the assessment of the present claims 9,10 on the question whether they are industrially applicable, no unified criteria exist in the PCT Contracting States. The patentability can also be dependent upon the formulation of the claims. The EPO, for example, does not recognize as industrially applicable the subject-matter of claims to the use of a compound in medical treatment, but may allow, however, claims to a known compound for first use in medical treatment and the use of such a compound for the manufacture of a medicament for a new medical treatment.
2. In case this application is proceeded in the european phase we draw the Applicant that the term "substituted" used in the definition of R2 in claim 1. This term should clarified (see T939/92).